CLAIMS

This listing of claims will replace all prior versions and listings of claims in the Application.

Listing of Claims:

1. (Currently Amended): A media processing system comprising:

a media source of media content;

a matrix switch having a plurality of matrix switch inputs and a plurality of matrix switch outputs, wherein the matrix switch dynamically couples particular ones of the matrix switch inputs to particular ones of the matrix switch outputs based, at least in part, on a matrix switch programming grid;

a software object, coupling the media source to one or more of a plurality of processing chains, to satisfy multiple, non-combinable requests to the media source for the media content received from the matrix switch, wherein the non-combinable requests for media content include one or more of: requests where a source time of the requested media content do not align, requests where a project time of the requests do not align, ~~and~~or requests where the requested media content is to be processed differently so as to require a separate processing chain, wherein a first one of the plurality of processing chains is linked with a first matrix switch input of the plurality of inputs that is dynamically coupled to a first matrix switch output of the plurality of outputs, wherein the matrix switch is configured to share a buffer of the first matrix switch input with the first matrix switch output to which the first matrix switch input is dynamically coupled;

one or more processing units configured to implement the software object and the matrix switch; and

a system memory configured to store the software object.

2. (Previously Presented): The media processing system according to claim 1, wherein the software object is a segment filter.

3. (Previously Presented): The media processing system according to claim 1, wherein the software object is exposed to an operating system executing on a computing system implementing the media processing system.

4. (Canceled)

5. (Previously Presented): The media processing system according to claim 1, wherein the software object is implemented within a filter graph representation of a user-defined media processing project, to reduce invoked instances of the media source required to satisfy said non-combinable requests.

6. (Currently Amended): The media processing system according to claim 1, wherein the software object receives independent requests for the media content from the matrix switch for the one or more media processing chains.

7. (Previously Presented): The media processing system according to claim 6, wherein the software object generates and issues one or more seek command(s) to satisfy said requests.

8. (Previously Presented): The media processing system according to claim 1, wherein the media processing system selectively invokes multiple instances of the software object to satisfy multiple simultaneous requests for content, wherein each instance of the software object requires an associated instance of the media source and a processing chain.

9. (Previously Presented): The media processing system according to claim 1, wherein the software object serializes multiple simultaneous requests for media content received from multiple processing chains.

10. (Previously Presented): The media processing system according to claim 1, wherein the software object is a segment filter in a filter graph of filters dynamically generated to process media in accordance with a user-defined processing project.

11. (Currently Amended): A media processing system comprising:

   a media source of media content;

   a software object, coupling the media source to one or more of a plurality of processing chains, to satisfy multiple, non-combinable requests to the media source for the media content, wherein the software object is a segment filter in a filter graph of

filters dynamically generated to process media in accordance with a user-defined processing project;

. a scalable, dynamically reconfigurable matrix switch having a plurality of inputs and a plurality of outputs;

at least one matrix switch input being communicatively linked with a first . processing chain portion;

at least one other matrix switch input being communicatively linked with a second processing chain portion;

the matrix switch being configured to dynamically couple one or more of the matrix switch inputs to one or more of the matrix switch outputs based. at least in part, on a media time associated with a user-defined media processing project, a project time associated with the user defined media processing project, and content of a matrix switch programming grid;

one or more processing units configured to implement the software object and the matrix switch; and

a system memory configured to store the software object.

12. (Currently Amended): The media processing system of claim 11, wherein the matrix switch is configured to dynamically couple a first input of the one or more matrix switch inputs to a first output of the one or more matrix switch outputs, and wherein the matrix switch is configured to share a buffer of the first input that with the first output to which the first input is dynamically coupledsaid one or more matrix switch inputs to said one or

~~more matrix switch outputs based, at least in part, on a media time associated with a~~

~~user defined media processing project.~~

13. - 15. (Canceled)

16. (Currently Amended): A media processing system comprising:

        a media source of media content;

        a matrix switch having a plurality of matrix switch inputs and a plurality of matrix switch outputs, wherein the matrix switch dynamically couples particular ones of the matrix switch inputs to particular ones of the matrix switch outputs;

        a software object, coupling the source to one or more of a plurality of processing chains, to satisfy multiple, non-combinable requests to the source for media content, wherein non-combinable requests for media content include one or more of requests where a source time of the requested content do not align, requests where project time of the requests do not align, and requests where the requested content is to be processed differently so as to require a separate processing chain, wherein the software object is a segment filter in a filter graph of filters dynamically generated to process media in accordance with a user-defined processing project. wherein a first one of the plurality of processing chains is linked with a first matrix switch input of the plurality of inputs that is dynamically coupled to a first matrix switch output of the plurality of outputs, wherein the matrix switch is configured to share a buffer of the first matrix switch input with the first matrix switch output to which the first matrix switch input is dynamically coupled;

one or more processing units configured to implement the software object and the matrix switch; and

a system memory configured to store the software object.

17. (Original): The media processing system of claim 16 further comprising a scalable, dynamically reconfigurable matrix switch having a plurality of inputs and a plurality of outputs;

at least one matrix switch input being communicatively linked with a first processing chain portion;

at least one other matrix switch input being communicatively linked with a second processing chain portion; and

the matrix switch being configured to dynamically couple one or more of the matrix switch inputs to one or more of the matrix switch outputs.

18. (Original): The media processing system of claim 17, wherein the matrix switch is configured to dynamically couple said one or more matrix switch inputs to said one or more matrix switch outputs based, at least in part, on a media time associated with the user defined media processing project.

19. (Original): The media processing system of claim 17, wherein the matrix switch is configured to dynamically couple said one or more matrix switch inputs to said one or more matrix switch outputs based, at least in part, on a project time associated with the user defined media processing project.

20. (Original): The media processing system of claim 17, wherein the matrix switch is configured to dynamically couple said one or more matrix switch inputs to said one or more matrix switch outputs based, at least in part, on content of a matrix switch programming grid.

21. (New): The media processing system of claim 10, wherein the matrix switch is configured to dynamically couple one or more of the matrix switch inputs to one or more of the matrix switch outputs based, at least in part, on a media time associated with the user defined media processing project.

22. (New): The media processing system of claim 10, wherein the matrix switch is configured to dynamically couple one or more of the matrix switch inputs to the one or more of the matrix switch outputs based, at least in part, on a project time associated with the user-defined media processing project.